

creative arts (see Chapter 6 for more discussion on this point). In this volume, when we refer to words and phrases drawn from these broad popular and often everyday uses, we use quotation marks. When we use words or phrases that carry specific technical meanings within the social science disciplines, we italicize these so that they will stand out within the text as a whole. We generally italicize these terms only upon their first appearance within each chapter or when we want to emphasize the technical research-based meaning of the term.

3. Theories of structures of formal schooling, involvement of state systems, and conflicts between overt and hidden curricula come from scholars, such as Pierre Bourdieu, Suzanne deCastell, Henry Giroux, Herve Varenne, Raymond McDermott, Peter McLaren, and Hugh Mehan. "Critical literacy" studies share theoretical starting points with scholars who extend their work beyond the institutions of schooling to governmental bureaucracy, employment opportunities, and medical service delivery. A notable difference, however, lies in the fact that the work of critical literacy scholars centers on distinctions between "Discourse" (sharing much in definition with "Culture" but focusing on signs and symbols) and "discourse" (defined in its ordinary usage as a stretch of units of language). Major figures within critical literacy include James Gee, Colin Lankshear, and those within the New London Group, including Courtney Cazden, Allen Luke, Brian Street, and others. Intellectual histories of these groups may be found in Cope & Kalantzis, 2000; Gee, 1990/1996, 2000; Gee, Hull, & Lankshear, 1996; Hull & Schultz, 2002; Lankshear, 1997; Lankshear & Knobel, 2003; New London Group, 1996; Street, 1993a.

CHAPTER 2

The Ethnographer's Field Entry and Tools of Practice

The attachment, the identification, the uncertainty, the mystique, and perhaps above all, the ambivalence. (Jackson, 1990, p. 33)

As an ethnographer, Molly Mills studied Roger as he juggled and talked about his self-chosen identity. In the first weeks of her research, Molly's mind wandered. She found herself caught up in childhood memories. Weren't jugglers like clowns, tricksters, and fools? Didn't they run away from home to join the circus? Could she really be putting an academic lens on the frivolity of juggling? What started her on this quest? Was it her own curiosity about how, as a child, she had learned to play the violin while her friends pursued less challenging options?

Molly watched Roger as he practiced next to a wall and tried his hand with new combinations and numbers of balls. She listened as he refused to describe juggling as anything other than "disappointingly easy." None of this made sense even as Molly began to compare Roger's actions and talk of learning with what others did and said in their self-chosen learning of complex pursuits. She looked for what was common as well as different in their uses of words, pictures, and practices. She read everything she could find on learning complex mathematically based physical skills. She fretted that while Roger denied that actual mathematical calculations were part of what he did, his talk about juggling was full of technical vocabulary, explanations of physical properties, and what he called "intuitions" about how patterns work under conditions of change.

Molly collected masses of data: transcripts, fieldnotes, books on juggling, and notes from informal conversations with others. She had started out to study how learning happens as an individual decides to gain expertise in highly complex learning challenges. What she found led her to need to know what others had concluded on this topic and how they had accounted for learners' uses of patterns of symbolic structure, contradictory self-representations, and ambiguities about what could and should be known about their own skills.

Most of us as ethnographers identify with Molly. Ambivalence, uncertainty, and a curious attachment to figuring out what is happening keep ethnographers wanting to learn what others just accept or never really think about. Yet ethnographers know also that they are "invaders" of a certain sort, picking up and putting down facts and feelings of others, while simultaneously reflecting on their own memories and ideas. Even something seemingly so trivial as juggling had turned out for Molly to be locked in learner convictions and hidden within obvious practices.

The quote that opens this chapter comes from anthropologist Jean E. Jackson, who in the 1980s undertook a series of interviews on ways that ethnographers created, used, and rethought the genre of fieldnotes. Reflections on this genre, so central to the work of ethnographers, circled through ethnographers' joyous and yet ambiguous travails from entering a chosen field site to writing up their fieldnotes. In this chapter, we address at the outset how we think most ethnographers insert themselves into their chosen work. We then consider the ways they select their field site. We look at how ethnographers determine their tools of practice and keep in mind core research values, such as those surrounding *reliability*, *replicability*, and *validity*.

We suggest that the ways in which these tools and values have developed within ethnography are critically distinct

from those of *qualitative research* more generally. This latter term embraces one or more of the face-to-face methods of inquiry (such as interviewing) and stresses the epistemological foundations of research based on these methods. Often absent, however, is grounding of chosen methods in theoretical perspectives or conceptual frameworks from a particular social science discipline.

In contrast, ethnography as genre and goal relies on some linkage with or acknowledgment of its history within anthropology and its subfields, such as linguistics. Ethnography, as we see in subsequent chapters, is a theory-building enterprise constructed through detailed systematic observing, recording, and analyzing of human behavior in specifiable spaces and interactions. In this volume, we do not equate ethnography with qualitative research, as some methodologists do (cf. Hammersley & Atkinson, 1995, p. 2). As you read ethnographers' accounts, from the field entry issues detailed in this chapter, to the ethnographic practices of fieldwork described in Chapters 3 and 4, keep in mind a search for distinctions. Doing so will help you work out for yourself exactly how you see the relationship between qualitative research more generally and ethnography in particular.

ENTERING THE FIELD: SHIRLEY GOES TO TRACKTON AND ROADVILLE

To undertake ethnography is to enter willingly into a messy set of tasks that will continue over a considerable period of time among strangers that the ethnographer may inevitably "betray." Field research has been described as "an act of betrayal, no matter how well intentioned or well integrated the researcher." Consequently, the ultimate "business" of the ethnographer "makes public the private and leaves the locals to take the consequences" (Miles & Huberman, 1984, p. 233).

What opens ethnographers to the idea of undertaking their particular study? If pushed hard enough, most ethnographers

admit that a sense of curiosity and adventure, a desire to know, a sense of "real" unknowns take them to the field. Moreover, within every such researcher rests a core concern about the quality and integrity of human life. (See, for example, anthropologist Margaret Mead's introductions to Mead, 1930, 1956; see especially pp. 31–35, 1956, on knowing "what literacy is.")

We thus begin this chapter not with the usual advice that ethnographers start with a "good" research question but rather the reminder that is a refrain throughout this volume: As you collect data, know the company you keep as ethnographer and get to know yourself as constant learner—ever curious and open to what's happening. Remember always that we study something because we already know something.

The opener that led to *Ways with Words: Language, Life and Work in Communities and Classrooms* (Heath, 1983/1996b), a book often seen as centered on language, came from knowing that the political dimensions of the late 1960s were wiping away social and historical realities. When the civil rights movement and desegregation came to the southeastern United States in the late 1960s, most White teachers had had lifelong and almost daily interactions with Blacks of their region. Yet the communicative underpinnings of these relationships suddenly seemed to disappear when White teachers claimed they could not understand the talk of Black children in their classrooms.

Further "new" proclamations came in local newspapers and from Black and White teachers alike: Black children could not speak "proper" or "standard" English; they did not listen well; and they came to school without skills in counting, identifying, and classifying. Yet in all rural and small-town areas of the Southeast, every radio station carried programs in which local and national Black speakers shifted back and forth across varieties of English. The civil rights movement had generated more widespread attention to the oratorical powers of Black speakers than at any other time in American history.

Moreover, every merchant in small towns knew well the counting, identifying, and classifying skills of children, Black

and White, who were sent to stores by their caregiving grandparents with whom the children stayed while parents worked. In the springtime, these children knew how to distinguish one type of plant seedling from another, one kind of hoe from another, and what the count should be on certain pharmaceutical prescriptions they were sent to the drugstore to collect. In many parts of the Southeast, every White knew members of the Black middle class whose linguistic repertoires exceeded their own. Periods in military service, residence in northern cities, or extensive travel in connection with their professions had expanded the number of dialects, languages, and styles of talking of the numerous Blacks who sought opportunities outside the Southeast after World War II.

Shirley's study of language socialization in southeastern communities, both Black and White, initially seemed to be about language. *Ways with Words*, however, ultimately proved to be about integrity and quality of life and the need to understand how long-standing personal human relationships slip away under political and social pressures. This illustration of what can open a desire for fieldwork in a particular place and time underscores the fact that within ethnography, the researcher is the instrument.

Though much is said about *participant observation* as the key means of collecting data as an ethnographer, the truth is that only rarely can we shed features of ourselves to be a "real" participant. Molly was not a juggler; struggling to learn to be one could help her talk with Roger, but she could never take on features that emerged as central in Roger's identity of himself as juggler. Ethnography forces us to think consciously about ways to enter into the life of the individual, group, or institutional life of the "other." (For more on how the history of anthropology in the early 20th century introduced the idea of ethnographer-as-participant-observer, see Chapter 6.)

What ethnographers really want to know is "What is happening here in the field site(s) I have chosen?" This question asks not just for a description of events and actions that people create, react to, assess, and learn within but also for history

and explanations informed by and leading to theories. What does the ethnographer find when tracing the lines of connection for what is heard, said, and done by an individual such as Roger the juggler? What about the study of groups that interact in their own communities in historically established ways while meanwhile denying knowledge drawn from habits they have followed all their lives? How do people adapt when their daily lives shift radically as a result of decisions brought about by social forces and institutions over which they have little or no control?

THE CONSTANT COMPARATIVE

Since ethnographers always work somewhere within a series of interlocking circles, they have to keep looking in multiple ways and directions. They look at individuals as they learn, to be sure, but they also have to see how these learners locate themselves within groups of identity-makers and in relation to influential formal institutions.

Ethnographic research has come to mean "making the familiar strange," a term probably first used by the 18th-century German poet-philosopher Friedrich von Hardenberg and circulated later by William Wordsworth, Samuel Taylor Coleridge, and T. S. Eliot. Most anthropologists know the idea with respect to what the ethnographer is supposed to do (Agar, 1980/1996). But, in any situation, before tackling the documentation of the "strange," the ethnographer has to know as much as possible about the "familiar." This means using accurate observation to find out what is already known—and to whom, for what, and under what kinds of circumstances.

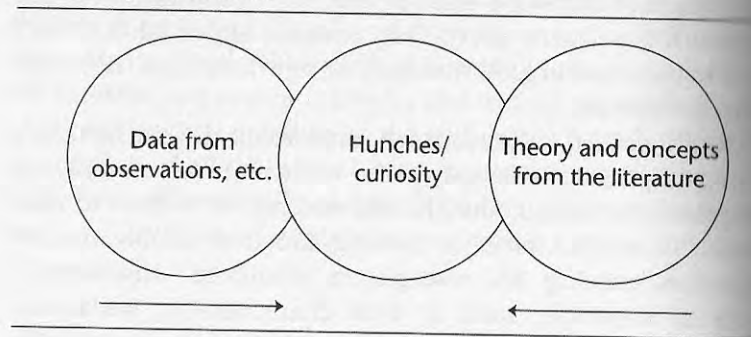
This kind of finding-out in the work of ethnographers depends on a *constant comparative perspective* that cuts to the past and to the future of the topic or area under study. In the present chapter, we develop what we mean by the constant comparative through considering the ethnographer's place and tools of practice. This chapter parallels the next in that readers should move back and forth as they focus simultaneously

in literature reviews and methods of data collection. Once an ethnographer chooses a topic or area, the best preparation for fieldwork is to learn everything possible about what others have written and argued that may be relevant. Here the tricky word is "relevant."

Molly needed to know much more about the mathematics of juggling than she bargained for when the idea of studying a juggler came to her. She also did not expect to have to read books on complex problem solving, practical intelligence, or embodied learning. She read general studies of "unschooled" types of expertise, such as that characterizing waitresses, plumbers, dancers, and actors. She read about how to do ethnography, what anthropology of education was and had been, and she talked to several anthropologists who studied learning. As she began her collection of data through observing and listening, she came to see books from more "distant" fields, such as theater and gesture, as "relevant." This back-and-forth observing, noting, reading, thinking, observing, and noting constitute data collection toward fieldwork as an ethnographer. Consider that this may well be a set of practices distinguishing ethnography from other forms of "qualitative" research, such as classroom observation or interviews that may be less recursive, with less back-and-forth among historical, comparative, and current fieldwork sources.

What are the theories, field sites, and findings of past and contemporary work related to the ethnographer's chosen topic? Ethnographers often note the sentiment that "non-field" sources suggest lines of questioning and topics to pursue in fieldwork (cf. Lederman, 1990, p. 76). Because much of any ethnographic pursuit is driven by curiosity about aspects of human behavior, building an intellectual framework that defines and legitimizes the topic or area of attraction for the individual researcher is essential. Otherwise, the original impetus may drift away or come to seem silly and trivial even to the ethnographer. This is why questions that center on behaviors that can be documented, quantified, compared, and analyzed through various theories need to scaffold original hunches or impulses (see Figure 2.1).

Figure 2.1. The Recursive Process in Doing Ethnography:
Theory and Practice



This recursive process also reminds us that we can no longer play on the perhaps still publicly perceived tropes of “innocent ethnographer” who enters the field with a mind clear of all presuppositions ready to take part as “full” member. Rather we acknowledge our original hunches and test these against the findings of other researchers. We also enter our field site(s) open to learning. As we do so, we keep in mind the many limitations we bring as instrument. Our physical features (such as age, gender, size, and phenotype), as well as our own cultural identities and life experiences, prevent our fully participating as the “other.” Reflexivity, rather than innocence, characterizes contemporary ethnography. (For more on this point, see Chapter 6.)

An ethnographer intending to study patterns of interaction surrounding structures and uses of language and literacy has, then, first to find out about the data that other researchers have used to support their theories. Once in the field, the ethnographer keeps this information in mind while observing, listening, and recording. Molly wanted to know more about learners who take on tasks leading to an area of self-selected expertise. She read all that she could find about self-motivated learning of cognitively complex tasks. She noted how other researchers had gone about studying such situations.

As she did so, she refined the central data collection tasks of her initial fieldwork; she wanted data that would answer basic questions. What are the identifiable features that characterize how Roger moves through any given day? How, when, and where does juggling enter into each day's activities, times, and spaces? What are the distinctive, definable, and quantifiable features of situations in which Roger self-identifies as juggler? The ability to ask such questions comes from studying the following:

1. Case studies of other jugglers
2. Comparative cases of individuals who decide on their own to become experts in other highly technical manual and mental accomplishments
3. Technical accounts and mathematical representations of juggling
4. Theories of learning that relate to everyday learning of complex skill sets

Note that Molly did not ask *why* Roger was learning juggling. Most ethnographers stick with questions of who, when, what, where, and how. The fundamental challenge to ethnographers is to lay out *what is happening*. *Why* questions are teleological in nature and resist proof by empirical means. The goals of the social sciences, including anthropology, do not conform to the interests of foregone conclusions based in faith and value judgments about what is “true,” “wonderful,” or “good,” or what is “false,” “ugly,” or “evil.”

Collecting data and mindfully contrasting aspects of time, space, material objects, actors, and interactional routines call for close observation and consistent recording. Conceptual frames for analyzing such data derive from knowledge that the ethnographer has gained from other case studies, readings of theories of learning, and prior areas of specialized training for the ethnographer (e.g., extent of knowledge of linguistics).

Most ethnographers focus initially on similarities that occur across different times and under varying sets of circumstances

within the chosen research situation. By gaining a sense of what is predictable and familiar to those within the local field site, ethnographers begin to see patterns of local behaviors and beliefs that generally lie outside the awareness of the interactants. Yet deep respect for local knowledge by those living or working in the field site is crucial. These individuals have a lifetime of responding with precision and predictability to the minutiae of their everyday lives. This is true even though they may not see the need for or be able to identify and explain these patterns through specifics of *how*, *what*, and so on. This point holds even when a highly specialized field of knowledge and set of skills have passed from one generation to the next (c.f. Greenfield, 2004).

In describing similarities, ethnographers follow a fundamental rule in data collection: "Describe only what does happen, not what does not happen." Researchers unaccustomed to working in a cross-cultural or constant comparative frame often fall into the ethnocentric trap of claiming: "They do x and we do y, or we do x and they do not."

To illustrate the error of ethnocentrism, Buddhists use several versions of the story of the turtle and fish. One story goes like this:

One day the turtle decides to go for a walk on dry land. He is away from the lake for a few weeks. When he returns, he meets some fish who ask him: "Mister Turtle, hello! We have not seen you for a few weeks. Where have you been?" The turtle says, "I was up on the dry land." The fish are puzzled: "Up on dry land? What is this dry land? Is it wet?" The turtle answers "No, it is not." "Is it cool and refreshing?" the fish ask. "No it is not." "Does it have waves and ripples?" "No, it does not have waves and ripples." "Can you swim in it?" "No, you cannot." So the fish say: "It is not wet, it is not cool, there are no waves, you can't swim in it. So this dry land of yours must be completely non-existent, just an imaginary thing, nothing real at all." The turtle says: "Well, that may be so," and he leaves the fish and goes for another walk on dry land.

(www.beyondthenet/dhamma/nibbanaTurtle.htm. Accessed April 2007).

We as ethnographers might think of this story in a briefer form. When the turtle returns from dry land to water, and the fish question him, the turtle answers only by saying that the land has no waves, no seaweed, and so on. The fish admonish: "Don't tell us what it's *not*, tell us what it *is*!" The longer version of the story is more hopeful than our brief account, for the turtle takes with him on his return "walk on dry land" refined questions and the intention to see what is there this time.

The tendency to note what is not occurring comes from a fundamental orientation toward value judgment; perhaps humans (and turtles) have a natural response to see other situations and actions only in terms of their own. Humans (and fish) can discount as imaginary or simply nonexistent evidence they neither recognize nor wish to entertain within their worldview.

The tendency to make value judgments and to discount information that does not fit a current frame of reference reflects the common idea that *comparing* is the same activity or process as *contrasting*. The latter, more than the former, accounts for similarities and differences in terms of their labels, characteristics, uses, and contexts. When asked to *compare* one restaurant's pizza with another's, respondents generally offer judgments about merits: "Well, I think A's pizza is better; it fills me up more, and I always leave feeling satisfied." The question "How would you *contrast* the pizza served in restaurant A with that of restaurant B?" brings answers that include details about crust, contents, amount of topping, size of servings, and so on.

Every ethnographer must always be on guard against letting one's own beliefs about what *should be* overcome the accuracy of detailing what *is*. Molly was curious about juggling, and she brought to her study some long-standing judgments about what juggling was. She had to learn that ethnography is

not a playground for either being blind to what is happening or for "proving" one's own values or beliefs.

Ethnography, as noted earlier, is a theory-building and theory-dependent enterprise. Ethnographers construct, test, and amplify theoretical perspectives through systematic observing, recording, and analyzing of human behavior in specific spaces and interactions. It is the ethnographer's job to detail those spaces and interactions for the co-occurrence of language, literacy, and multimodalities for any situation or context selected as field site(s).

CO-OCCURRENCES FOR PATTERN DETECTION: SHIRLEY FIGURES OUT HOW SKATEBOARDERS TELL TIME

The best way to get around the tendency either to contrast or to compare in simplistic ways is to keep in mind that the *constant comparative* calls for vigilance to *co-occurrence*. What happens as something else happens? How do such events take place similarly again and again? When does a particular pattern of events or process for one or another phenomenon seem out of sync with established habits? When does behavior show some kind of variation from what others say they do or will "always" happen? Anthropologists learn, in practice, to rely on the fact that ideals and conventions often become evident only when the anthropologist unwittingly breaks these local "rules" and therefore needs rebuke, instruction, and guidance from those who are "in the know" (cf. Okely, 1983, pp. 44–45).

As the fieldworker searches for *co-occurrences*, patterns emerge that lie outside either the consciousness or the concern of locals, who often view as self-evident and foolish the work that ethnographers undertake to unravel patterns of behavior and their contexts.

For example, Shirley found in her study of how young people establish and manage their own learning environments outside of family and school that skateboarders in one

urban area always showed up late at night at a specific location within minutes of one another. Yet none wore watches or showed any obvious way of keeping close track of time, and members of the group came via different modes of transport. This precision of timing seemed curious to Shirley, since the young people reported of themselves (and others confirmed the same idea) that they did not care about time and, in fact, took pride in not showing up "on time" for anything. Months passed before Shirley could figure out just how they were so precise in their synchronized arrivals. She records this ethnographic "aha!" in her personal reflections that run parallel to her fieldnotes (a technique Brian and Shirley recommend and illustrate in Chapter 4).

I have finally unraveled the details of predictability that govern their consistent "on time" behavior each night at the skate park. After many rereadings of fieldnotes, I realized that the boys talk frequently about a particular television series that was either previewed or shown each week at the same time on a station widely available in the area. I then hypothesized that perhaps the skateboarders' enthusiasm for the show led them in their various neighborhoods to collect in front of television stores to watch the preview spot or the show together. The next few nights, I checked this out, and indeed this was the case. Therefore, wherever they were in the city, as the time for the television show approached, they checked out television stores to gauge the actual distance from their skateboarding area. Once the television show was over, they headed for their favorite skateboard location. They all knew how long it would take them to get to the skateboard area from the particular television stores along their routes through the city. Thus they "planned" accordingly. By this time of night, their chosen location of practice would be relatively free of interference by the police who kept them away during daylight hours when their fast moves and seemingly erratic patterns threatened tourists. But their city had a curfew requiring all young people under 18 to be off the streets on week nights by 1 A.M. Therefore their "being on time"

(my phrase—not theirs) ensured a certain amount of practice time before they had to disperse.

Putting together such a disparate set of details is necessary in any field site to determine patterns and the co-occurring features of their context.

In Shirley's case, she uncovered not only the means by which the young men's behaviors reflected predictable timing but also a coalescence of common interests that "bound" the group together beyond the purview of their skateboarding location. Moreover, the groups had to have some conscious awareness of how long it would take to get from their different television viewing points scattered around the city to the designated skateboarding area.

Shirley's analysis of detail centered on being able to note patterns of *co-occurrence*. Transcriptions of conversations of the young men when they broke their skateboarding practice for a smoke finally revealed the critical detail that they had a favorite television show in common. Shirley needed this detail of patterned interaction to determine the unspoken coordination behind the boys' precision in their arrival time.

Yet no member of the group ever articulated this set of strategies, nor, in the end, did they even see Shirley's "finding" as being of any significance at all. Shirley's reflections near the end of the study record the following:

This evening, knowing I might not see the boys again for several months, I debriefed them on what I had learned by hanging out at their skateboard spot for so many months. One thing I told them was how I had solved my early puzzlement over their coordinated punctuality. Their faces registered no trace of surprise or positive acknowledgment of what I regarded as quite a piece of detective work. Instead, they turned immediately to talking about this particular television show and asking me what I thought of it. They ended this portion of the debriefing by saying, almost in chorus: "Yeah, hey, we don't miss that show!"

What the boys did to get themselves to the park on time was so routine and logical to them that they found nothing special in the fact that someone else had unlocked this set of behaviors. Yet for Shirley, her detective work uncovered strategies of coordination for the young men around both entertainment and their insistence on the need for practice in skateboarding. Both of these activities were important enough to ensure coming together as a big group in a certain place at a particular time—something outsiders believed "they could never do."

In terms of methods of work, all Shirley did as an ethnographer was to take note of one particular feature of the young men's interaction (arrival time) and then set about to determine what else was going on simultaneously in the in-transit blocks of time of the different groups. She asked of her fieldnotes and her observations: What else is going on at the same time? How frequently does it occur and under what circumstances? To have asked the boys why they always came on time would have produced points already obvious, such as "we want to," "it matters," or "got to get there when the cops aren't around." The big question was *how*? Searching out *co-occurrences* lies at the heart of the *constant comparative* ethos and approach of ethnographers. This search will mean dealing with a number of levels and domains of knowledge over which locals have out-of-awareness expertise.

Useful to keep in mind is the well-known reflection of anthropologist Clifford Geertz (1973) on the power of "thick description" to get at the patterns behind how a specific action takes place in terms of its context. But describing deeply will not do everything for the ethnographer. In reflecting on his career, Geertz (2005) mused that his early life "predisposed me to becoming, in both life and work, the seeker after a pattern, however fragmentary, amid a swirl of accident. . . . I assumed, and I still assume, that what you are supposed to do is keep going with whatever you can find lying about to keep going with: to get from yesterday to today without foreclosing tomorrow" (p. 123). The capacity and will to keep going in the search derive from the researcher as instrument with a history

and a drive toward resolving the puzzle of where fragments can lead.

RESISTING PRECONCEPTIONS

Only with the *constant comparative* and *co-occurrence* can the ethnographer get beyond everyday preconceptions about a particular group or situation. Skateboarders in their local community were widely regarded as “slough-offs,” “school failures,” and “kids who aren’t coming to any good in life.” When questioned, community members always noted that “these kids” failed in school and would never be able to hold down jobs. Punctuality, dress, respect behaviors, and “caring about something that matters” were features often denied as characterizing the skateboarders. Therefore, when precision in punctuality showed up consistently in Shirley’s data, this feature jumped out in terms of the need for explication through constant comparative analysis. Shirley’s avoidance of this negative preconception is what allowed her to probe into the management of these evening skateboard gatherings—just as Brian’s response to negative preconceptions about the “illiteracy” of Iranian villagers prompted him to follow through to learn what was “really going on” (see Chapter 3).

The theoretical implications of Shirley’s “finding” echo the studies of effective out-of-school or after-school learning environments concluding that “making time matter” defines the dedication of the young. If young people know that being late makes a difference that is “real” to them, they find ways to be punctual. For play rehearsals, sports practices, and community service meetings with officials who listen, most young people show up on time. When punctuality rules seem arbitrary or link to nothing that has meaning for them, young people often have erratic patterns of arrival. For example, when the window of time for use of a highly prized sound system is limited, and the youth band has access only during this brief span, members show up on time. Rules merit respect and re-

sponse when they tie to opportunities for meaningful practice and performance. The skateboarders valued their physical and temporal location and thus each embraced the responsibility to arrive on time. In so doing, they displayed dedication to a group meaningful to them despite the considerable risk of the activity.

It is often the case that ethnographers “uncover” rule-governed behaviors, norms of interaction, and complex skills for groups or activities previously unacknowledged, unsanctioned, or thought of in entirely different ways. Such was the case for child vendors on the streets of Brazilian favelas who engaged daily in intricate mathematical calculations (Nunes, Achillemann, & Caraher, 1993; Saxe, 1988). Work on “street mathematics” stimulated educators to look anew at their earlier ideas about “remedial” instruction in mathematics needed for children from underresourced communities.

Eglash and his colleagues (2006), for instance, build upon such “ethnomathematics” to examine the performance and engagement of underrepresented minority students in school mathematics. The team works with students using Culturally Situated Design Tools (CSDT) to link their everyday knowledge with that of the school curriculum. Web-based applets, developed by students and tutors in collaboration, call upon mathematical knowledge embedded in cultural designs such as cornrow hairstyles, Native American beadwork, Latino percussion rhythms, and so on. CSDT allows students to use these underlying mathematical principles to simulate specific inquiries in calculation and design. This work indicates ways in which educators call upon basic ethnographic work to build learning on students’ prior cultural knowledge (see also Street, Baker, & Tomlin, 2005).

This approach raises issues of *emic* and *etic* knowledge that run through this book: individual and group knowledge may be implicit or explicit in the design and execution of highly complex practices, such as creating beadwork and hairstyles or juggling and skateboarding. An *etic* or *constant-comparative* perspective enables us to understand underlying actions and

their co-occurring patterns and contextual features. The *emic* or locally held perspective of an individual, group, or institution, such as a school, can bring into its knowledge system that which has been established from an *etic* or comparative analysis. The complex algorithms in creating hairstyles or bead patterns, selling in street stalls, and juggling come to the surface with *etic* work and make such knowledge available for the use of others. In Chapter 6, we explore ethical dilemmas that come from such "sharing," as well as the growing need for subjects and researchers to collaborate. Together, they must determine the revelation of "insider" or *emic* knowledge to "outsiders." We would suggest that any ethnographic statement will be, to quote Michael Agar (1980/1996), a blend of "assumptions about perceptions or intent on the part of group members" as well as the ethnographer's background knowledge of related literatures and past research. We should always remember that the original sense of *emic* and *etic* "captures this blending and calls our attention to it" (pp. 239–240).

RELIABILITY, REPLICABILITY, AND VALIDITIES

Ethnographers undertaking "the art of fieldwork" struggle with questions of *validity*, *reliability*, and *replicability*. The kind of *reliability* called for in other social sciences—that which requires the same response to the same stimuli on repeated occasions—is not expected in ethnographers' study of daily life. *Replicability* seems similarly out of reach for ethnographers, since every field immersion is by definition unique. The in-the-moment ongoing cycle of events of any group is never identical upon repetition, nor is the individual ethnographer as a research instrument replicable in other individuals.

Since the 1980s, ethnographers have dealt with the problems of *reliability* and *replicability* in increasingly sophisticated ways through exemplary guides, models, and "methodological explorations" in ethnographic fieldwork. Some of these sound a cautionary note while others celebrate the depth and theoret-

ical generativity of ethnographic work (Agar, 1980/1996; Hammersley, 1992; Hammersley & Atkinson, 1995; Wolcott, 2001). In addition, several key articles "translate" the difficulties that ethnographers in specific fields, such as education, face in the context of comparison with those who do experimental research or survey-based work (e.g., Dobbert & Kurth-Schai, 1992; Eisenhart & Howe, 1992; Green & Bloome, 1997).

Underlying this chapter has been the accepted view that all ethnographic research is inherently interpretive, subjective, and partial. Thus what matters is that researchers lay out *decision rules* that guide how they do their work. The ethnographer must recognize that comparison between one study and another can only be based on descriptions of who, what, where, when, and how. Time moves on, people change, and circumstances differ, yet ethnographers have an obligation to make clear their *decision rules* as though they could imagine that someone else might step back into the same location or group.

In essence, a number of keen criteria hold for ethnographers; central among these are those of *comparison* and *contrast*. How well do the data stand up to what we know from other places? If the data show similarities and differences with other studies, then does the ethnographer offer reasonable explanations for this? Two kinds of *validity* lie at the center of decision rules—*empirical* and *theoretical validity*. The first asks us to ensure that we can answer the questions of whether or not the data "add up" and whether they back up the claims made. The second—*theoretical validity*—calls on us to feel confident that the account resulting from our work can stand up to critiques of the theories we have deployed or of those we posit (cf. Eisenhart & Howe, 1992).

To be sure, readers often speak of the *validity* of the work of ethnographers in terms of whether the situations and scenes depicted come alive or not. In methodological terms, the basis of this judgment relies on the extent to which ethnographers convey *co-occurrence* through rich details of time, space, artifacts, and interactants. Central to such co-occurrence is communication—whether gestural, musical, dramatic, or verbal.

Visual and performative dimensions of communication have to ring true in terms of interlocutors as well as audience and eavesdroppers.

In earlier decades, it was common for ethnographers to think of their field site as a fixed location. For many reasons, today's ethnographers, especially those who study learning, may follow individuals or groups that are on the move. Ethnographers can follow one phenomenon, such as ballet (Wulff, 1998) or one year's graduating class from a particular secondary school (Ortner, 2005). Some study women in relation to specific media-promoted issues or problems (Eisenhart & Finkel, 1998; Holland & Eisenhart, 1990). Some study multiple locations (Hannerz, 2003; Marcus, 1995, 1998). Some do comparative work on phenomena generally seen as the domain of other disciplines, such as governance (Shore & Wright, 1997), organizational life (Wright, 1994), or violence (Nordstrom & Robben, 1995). Nevertheless, more often than not, individuals reflecting unique and creative combinations of tactics and strategies in their learning remain a key focus of attention for ethnographers. How these individuals interact not only with artifacts and physical environments but also with other individuals and social norms lies at the heart of questions that motivate ethnographers.

Regardless of the individual, group, or moving and multiple field sites, ethnographers will benefit as they prepare proposals for their work from thinking through some early-stage *decision rules*. The questions below indicate the nature of these decisions and should stand out in the mind of any ethnographer proposing fieldwork.

- Who or what is the phenomenon of central focus? What are salient features?
- Who am I with respect to these individuals, the group, or the sites?
- What will the times and spaces of data collecting be?
- What makes me curious about what is happening here? How would I answer someone who asks about the one or two

central issues or experiences in my own life that have led to my being here?

- What will I consistently be able to tell others about who I am and what I will be doing here?
- How will I protect the identity and interests of those whose lives I propose to examine?

To be sure, once the proposal has been completed, there will be other decision rules to make that will guide the data collection, as well as analysis and presentation of research results. Later chapters indicate some of these decision rules that apply from literature reviews through data collection and on to production of written, oral, or visual genres reporting the research.

SUMMARY

This chapter has tried to make sense of Roger's stated convictions about his own learning and Molly's challenges in tackling her initial curiosity about how people go about learning self-chosen highly complex tasks. Ethnographic work is one of these highly complex tasks.

Just as Roger goes back and forth between actual practice, reading books and watching others, building models in his head, and thinking of what he might do to improve, so ethnographers engage in similar zigzag work from start to finish. They must read all they can about their area of curiosity, think ahead about what is realistic and practical to achieve, and learn how to explain their endeavor in clear, concise ways. Initial selection of relevant materials before even entering the chosen field site helps to focus the research. The questions at the core of an ethnographer's essential curiosity will inspire an opening up to the learning that comes from the places and tools of the work ahead.